

### **Remarks**

The present response is being submitted in reply to the Office action issued on April 25, 2006. Claims 1-16 are pending in this application. By the present response, claims 1, 12 and 15 have been amended and claim 14 has been canceled. Support for amended claim 15 can be found in the specification at paragraphs [000034] and [000035].

Claims 1 and 12 were amended to correct informalities, as discussed below. No new matter has been added. Reconsideration is respectfully requested in light of the amendments being made hereby and of the following remarks.

### **Claim Objections**

The Examiner has objected to claim 1 since it recites "...said polymer(meth)acrylates..." but only monomers are recited in part "a)." This term has been amended to read "polar (meth)acrylates."

Claim 1 has also been objected to because it recites "Tserevitinov hydrogen." The Examiner points out that the more common spelling of this term in the chemistry field is "Zerewitinoff hydrogen." This change has been made in claim 1, as well as in claim 12.

No new matter has been added. Withdrawal of this objection is respectfully requested.

### **Rejection of claims 14 and 15 under 35 U.S.C. 112, second paragraph and 35 U.S.C.**

### **101**

Claims 14 and 15 have been rejected under 35 U.S.C. 112, second paragraph and 35 U.S.C. 101 as being indefinite for reciting a use without any active, positive steps delimiting how this use is actually practice.

Claim 14 has been canceled. Therefore this rejection is no longer germane to claim

14 and should be removed.

Claim 15 has been amended to recite active positive steps delimiting how the use is actually practiced. Support may be found in the specification at paragraphs [000034] and [000035]. No new matter has been added. Withdrawal of this rejection is respectfully requested.

**Rejection of claims 1-9, 12, 13 and 16 under 35 U.S.C. 102(b)**

Claims 1-9, 12, 13 and 16 have been rejected under 35 U.S.C. 102(b) as being anticipated by European Patent No. 0735122 A2 (Inagi, et al.). According to the Examiner, Inagi, et al. teach each and every feature of the present invention set forth in these claims. Specifically, the Examiner states that Inagi, et al. disclose an adhesive base material comprising a polymer obtained by polymerizing a glucosloxy alkyl (meth)acrylate, a hydroxyalkyl (meth)acrylate and a polyfunctional monomer. The Examiner also states that Inagi, et al. teach that the examples of hydroxyalkyl (meth)acrylate include 2-hydroxyethyl (meth)acrylate and hydroxypropyl (meth)acrylate, which are readable as component "a) – polar methacrylates" in present claim 1. The Examiner essentially goes on to argue that every limitation of claims 1-9, 12, 13 and 16 are disclosed by Inagi, et al.

The Applicants respectfully disagree with the Examiner's conclusion and submit that the present invention is patentably distinct from the invention disclosed in the Inagi, et al. reference. Moreover, the Applicants submit that each and every feature set forth in these claims is not taught or disclosed by the cited reference, and therefore the reference does not anticipate the present invention as set forth in claims 1-9, 12, 13 and 16.

After reviewing the reference, the Applicants submit that Inagi, et al. teach an

adhesive base material comprising a polymer obtained by polymerization of (1) a glucosyloxy alkyl (meth) acrylate, (2) a hydroxyalkyl (meth)acrylate, (3) an alkyl (meth) acrylate and (4) a polyfunctional monomer. At page 2, line 54, Inagi, et al. states that the polymer with the desired properties of the invention thereof is obtained by polymerization of the aforementioned "specific four (emphasis added) monomers" (i.e., certain members of the characterized classes of monomers). In other words, the polymer according to Inagi, et al. is derived from at least four different monomers (emphasis added), one of those being a glucosyloxy (meth)acrylate, wherein the glucosyloxy group includes various monosaccharides and oligosaccharide with up to 10 saccharide units.

To the contrary of Inagi, et al., the polymer of the present invention is obtained by polymerizing (1) a polar (meth)acrylate with a Zerewitinoff hydrogen selected from the group consisting of mono-, bi- and polyepoxides, mono-, bi- and polyaziridines and melamine and its derivatives, or of a mixture of two or more of the aforementioned compounds, as defined in claim 1, (2) an apolar (meth) acrylate, and (3) a bi-, tri- or higher functional (meth)acrylate, or of a (poly)functional compound which is reactive to Zerewitinoff hydrogens selected from the aforementioned group as defined in claim 1.

Pertaining to claim 1, part (c), the sum of the listed monomers adds up to 100%-wt., while only an initiator may optionally be added. The addition of polymers other than those listed above is precluded in the presently claimed invention. Hence, the polymer of the present invention is derived only from three different monomers set forth above and in claim 1, none of which is a glucosyloxy (meth)acrylate.

Thus, the polymer as described in Inagi, et al. and the polymer of the present

invention are not identical since their respective compositions are different and thus every feature of the composition of the polymer according to present claim 1 is clearly not taught and disclosed by Inagi, et al.

The Applicants further submit that this difference between the two compositions, which at first might only appear to consist of omitting one additional monomer, is in actuality a substantial difference when one compares the properties of the respective resulting polymers. The polymer of Inagi, et al. is characterized as having excellent skin adhesion properties and swelling properties when impregnated with a solvent, i.e., a swelling rate of at least 300% (page 2, lines 53, 54; page 5, line 12). The present polymer also has excellent adhesion, but preferably on polar and semi polar substances, such as glass, metal and polycarbonate (paragraphs [00002] and [00003]). Furthermore, the present invention is inert to chemical influences and moisture (paragraph [00008]) and does not swell, since swelling would result in cohesive failure or detachment of the adhesive from the surface (paragraph [00007]).

As noted above, the polymer of Inagi, et al. fails to teach each and every limitation of claim 1, as well as claims 2-9, 12, 13 and 16, and therefore the reference fails to anticipate the presently claimed invention. Withdrawal of the present rejection is respectfully requested.

**Rejection of claims 10-11 and 14-15 under 35 U.S.C. 103(a)**

Claims 10-11 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inagi, et al. in view of U.S. Patent No. 6,713,641 (Weaver, et al.). According to the Examiner, Inagi, et al. teaches the limitations of claims 10-11, except for the

(meth)acrylated polyesters being conversion products of OH-terminated polyesters polyols with (meth)acrylic acid or reaction products of carboxyl groups-containing polyester polyols with hydroxyl group-containing (meth)acrylates; and (meth)acrylated polyurethanes being conversion products of amine- or hydroxyl-terminated (meth)acrylates with diisocyanates or polyisocyanates.

The Examiner also refers to Weaver, et al. which the Examiner states discloses a coating composition wherein the polymerizable vinyl compounds comprise a solution of a polymeric, polymerizable vinyl compound selected from acrylated and methacrylated polyesters, acrylated and methacrylated polyethers, acrylated and methacrylated epoxy polymers, acrylated and methacrylated urethanes, and mixtures thereof, in a diluent selected from monomeric acrylate and methacrylate esters (claim 17; col. 25, lines 24-31).

The Examiner states that the acrylated and methacrylated polymers and oligomers typically are combined with monomers, which contain one or more acrylate or methacrylate groups, such as monomeric acrylate and methacrylate esters, and serve as reactive diluents. The Examiner still further argues that the unsaturated polyesters, which are prepared by standard polycondensation techniques known in the art, are most often combined with either styrene or other monomers, which contain one or more acrylate or methacrylate groups and serve as reactive diluents (col. 13, lines 9-17).

The Examiner concludes that it would have been obvious to one having ordinary skill in the art to incorporate acrylated and methacrylated polyesters and acrylated and methacrylated urethanes as taught by Weaver, et al. in Inagi, et al.'s pressure sensitive adhesive polymer composition because such combination with acrylate and methacrylate

esters are suitable as adhesive and coating for such substrates as metals aluminum, steel, plastics, glass, wood, paper and leather and would thus arrive at the subject matter of claims 10-11 and 14-15. The Examiner also argues that the cited prior art references are analogous art because they are from the same field of endeavor concerning coating and pressure sensitive adhesive polymer compositions.

The applicant respectfully submits that to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success. Third, the prior art reference (or references when combined) must teach or suggest all of the claim limitation. Applicant respectfully submits that one skilled in the art would have no suggestion or motivation to combine the aforementioned references in order to arrive at the present invention. Additionally, even if one skilled in the art were to consider Inagi, et al. alone, or in combination with Weaver, et al., each and every limitation of the present invention would not be disclosed, nor would there be a reasonable expectation of success if the aforementioned references were to be considered. Still further, in order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned (M.P.E.P. §2141.01(a); *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992)). A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in

considering his problem (M.P.E.P. §2141.01(a); *Wang Laboratories Inc. v. Toshiba Corp.*, 993 F.2d 858, 26 USPQ2d 1767, 1445 (Fed. Cir. 1993); and *State Contracting & Eng'g Corp. v. Condotte America, Inc.*, 346 F.3d 1057, 1069, 68 USPQ2d 1481, 1490 (Fed. Cir. 2003), where the general scope of a reference is outside the pertinent field of endeavor, the reference may be considered analogous art if subject matter disclosed therein is relevant to the particular problem with which the inventor is involved).

The Applicants first respectfully disagree with the Examiner's opinion for at least the deficiencies of Inagi, et al. as discussed above. As noted above, Inagi, et al. fails to each every limitation of the presently claimed invention. Moreover, the respective polymers differ in their respective properties. To reiterate, the polymer of Inagi, et al. has good swelling properties and excellent adhesion, preferably on the skin, and is intended to be used in medical applications. On the other hand, the polymer of the present invention is inert to moisture and chemical influences, has excellent adhesion on polar or semi polar surfaces (rather than on skin) and is intended to be used in technical applications, such as connecting glass, stone and the like.

Consequently, it is respectfully submitted that one skilled in the art would not have considered the disclosure of Inagi, et al. to arrive at the presently claimed invention since the teachings of Inagi, et al. concern a very different area of expertise and application.

Regarding the use of (meth)acrylated polyesters and (meth)acrylated polyurethanes in claims 10 and 11, the Examiner cites Weaver, et al. as analogous art in which the features missing in Inagi, et al. are taught and disclosed. The Applicants respectfully disagree that the latter reference is analogous art and therefore applicable to the present

situation. The Applicants respectfully believe that the present situation is not unlike the situation addressed in *In re Clay*, 966 F.2d 656, 23 USPQ2d 1058 (Fed. Cir. 1992), where [c]laims were directed to a process for storing a refined liquid hydrocarbon product in a storage tank having a dead volume between the tank bottom and its outlet port wherein a gelled solution filled the tank's dead volume to prevent loss of stored product while preventing contamination. One of the references relied upon disclosed a process for reducing the permeability of natural underground hydrocarbon bearing formations using a gel similar to that of applicant to improve oil production. The court disagreed with the PTO's argument that the reference and claimed inventions were part of the same endeavor, "maximizing withdrawal of petroleum stored in petroleum reserves," and found that the inventions involved different fields of endeavor since the reference taught the use of the gel in a different structure for a different purpose under different temperature and pressure conditions, and since the application related to storage of liquid hydrocarbons rather than extraction of crude petroleum (emphasis provided). The court also found the reference was not reasonably pertinent to the problem with which the inventor was concerned because a person having ordinary skill in the art would not reasonably have expected to solve the problem of dead volume in tanks for refined petroleum by considering a reference dealing with plugging underground formation anomalies.).

In the present matter, the polymers according to Weaver, et al. are used to produce colored X-ray films, which have no adhesive properties at all. Since the reference fails to discuss otherwise, it is presumed that this is also the case for the disclosed coating compositions. While the coating compositions are obtained by polymerization of



monomeric acrylate and methacrylate esters and acrylated and methacrylated polyesters, polyethers and the like, polar (meth)acrylates with Zerewitinoff hydrogen selected from the group as set forth in present claim 1 are neither used or disclosed at all by Weaver, et al. Furthermore, the Applicants submit that various (meth)acrylate polymers with different compositions are known in the art, but that those polymers differ in their respective properties subject to their special composition. For example, some are soluble in water, others soluble only in organic solvents or are nearly insoluble in all solvents, while some swell when exposed to solvents. Moreover, some are adhesive, while others form non-adhesive films. Still further, the Applicants submit that the properties of the polymers can completely change as a result of minor changes in the composition, e.g., exchange of a monomer component. Much like *In re Clay*, the Weaver, et al. reference is not reasonably pertinent to the problem with which the Applicants at hand were concerned because a person having ordinary skill in the art would not reasonably have expected to solve the problem of the present invention, i.e., obtaining a chemically inert adhesive with good adhesion to glass and the like, by referring to a non-adhesive polymer coating for use in X-ray films.

Therefore, in conclusion, the Applicants respectfully submit that one skilled in the art would not have even considered combining the ingredients of an adhesive, used in medical applications, with good swelling properties and adhesion to skin, and a non-adhesive polymer coating for use in X-ray films, to obtain a non-swelling, chemically inert adhesive with good adhesion to glass and the like, when the removal of one specific monomer is additionally required to achieve the desired properties of the present

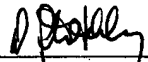
invention. Therefore, it would not be clear to one skilled in the art to combine the teachings of the cited references in order to arrive at the present invention. Withdrawal of this rejection is strongly requested.

### Conclusion

In light of the foregoing claims and arguments, it is believed that the present application is in condition for allowance, and such action is earnestly solicited. The Examiner is invited to call the undersigned if there are any remaining issues to be discussed which could expedite the prosecution of the present application.

Respectfully submitted,

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By:   
D. Peter Hochberg  
Reg. No. 24,603

D. Peter Hochberg Co., L.P.A.  
1940 E. 6<sup>th</sup> St. - 6<sup>th</sup> Floor  
Cleveland, OH 44114  
(216) 771-3800

DPH/SM